

Docket No. AUS920030471US1

CLAIMS:

What is claimed is:

1. A method in a data processing system for
5 transferring data from a memory to a network adapter, the method comprising:
 receiving a request to transfer data to a network adapter; and
 setting an offset for a starting address of the data
10 to align the data with an end of a frame in the memory, wherein the frame is transferred from the memory to the network adapter.
2. The method of claim 1 further comprising:
15 initiating a transfer of the frame from the host/system memory to the network adapter.
3. The method of claim 1, wherein the cache line size is 2^n , wherein n is a positive integer.
- 20 4. The method of claim 1, wherein the data is transferred from the memory to the network adapter through a bridge chip.
- 25 5. The method of claim 1, wherein the offset is zero if a frame size of the frame divided by a cache line size is zero.

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6. A method in a data processing system for transferring data from a memory to a network adapter, the method comprising:

identifying an amount of the data;

5 if the frame size for a frame is divisible by a cache line size with a remainder, setting an offset for the data to align the data to an end of the frame; and

if the frame size for if the frame size divided by the cache line size without a remainder, setting the
10 offset to zero.

7. The method of claim 6, wherein the offset is determined using the following:

$$\text{offset} = \text{CLS} - (\text{frame size} - \text{ABS}(\text{frame size}/\text{CLS}) * \text{CLS})$$

15 wherein CLS is the cache line size.

8. The method of claim 6 further comprising:
offsetting the data in the frame using the offset.

20 9. The method of claim 7 further comprising:
transferring the frame to the network adapter after offsetting the data using the offset.

10. A means in a data processing system for transferring
25 data from a memory to a network adapter, the data processing system comprising:

receiving means for receiving a request to transfer data to a network adapter; and

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setting means for setting an offset for a starting address of the data to align the data with an end of a frame in the memory, wherein the frame is transferred from the memory to the network adapter.

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11. The data processing system of claim 10 further comprising:

initiating means for initiating a transfer of the frame from the memory to the network adapter.

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12. The data processing system of claim 10, wherein the cache line size is 2^n , wherein n is a positive integer.

13. The data processing system of claim 10, wherein the data is transferred from the memory to the network adapter through a bridge chip.

14. The data processing system of claim 10, wherein the offset is zero if a frame size of the frame divided by a cache line size is zero.

15. A means in a data processing system for transferring data from a memory to a network adapter, the data processing system comprising:

25 identifying means for identifying an amount of the data;

first setting means for setting an offset for the data to align the data to an end of the frame if the frame size for a frame is divisible by a cache line size with a remainder; and

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second setting means for setting the offset to zero if the frame size for if the frame size divided by the cache line size without a remainder.

- 5 16. The data processing system of claim 15, wherein the offset is determined using the following:

offset = CLS - (frame size - ABS(frame size/CLS)*CLS
wherein CLS is the cache line size.

- 10 17. The data processing system of claim 15 further comprising:

offsetting means for offsetting the data in the frame using the offset.

- 15 18. The data processing system of claim 16 further comprising:

transferring means for transferring the frame to the network adapter after offsetting the data using the offset.

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19. A computer program product in a computer readable medium for transferring data from a memory to a network adapter, the computer program product comprising:

25 first instructions for receiving a request to transfer data to a network adapter; and

second instructions for setting an offset for a starting address of the data to align the data with an end of a frame in the memory, wherein the frame is transferred from the memory to the network adapter.

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20. A computer program product in a computer readable medium for transferring data from a memory to a network adapter, the computer program product comprising:

5 first instructions for identifying an amount of the data;

second instructions for setting an offset for the data to align the data to an end of the frame if the frame size for a frame is divisible by a cache line size with a remainder; and

10 third instructions for setting the offset to zero if the frame size for if the frame size divided by the cache line size without a remainder.

21. A server data processing system for obtaining
15 cultural context information from a client, the server data processing system comprising:

a bus system;

a network adapter connected to the bus system;

20 a memory connected to the bus system, wherein the memory includes a set of instructions; and

a processing unit connected to the bus system, wherein the processing unit executes a set of instructions to receive a request to transfer data to a network adapter; and set an offset for a starting address
25 of the data to align the data with an end of a frame in the memory, wherein the frame is transferred from the memory to the network adapter.

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22. A server data processing system for obtaining cultural context information from a client, the server data processing system comprising:

- a bus system;
- 5 a network adapter connected to the bus system;
- a memory connected to the bus system, wherein the memory includes a set of instructions; and
- a processing unit connected to the bus system, wherein the processing unit executes a set of
- 10 instructions to identify an amount of the data; set an offset for the data to align the data to the end of the frame if the frame size for a frame is divisible by a cache line size with a remainder; and to set the offset to zero if the frame size is divided by the cache line
- 15 size without a remainder.